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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/001,674 | 10/31/2001 | K.P. Ho | 25821P034 | 3183 |

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EXAMINER

KIELIN, ERIK J

ART UNIT

PAPER NUMBER

2813

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|----------------------------------|-----------|
| Office Action Summary | Application No. 10/001,674 | Applicant(s) HO ET AL. | |
| | Examiner Erik Kielin | Art Unit 2813 | <i>pw</i> |

-- Th MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 3-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/27/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action responds to the Amendment filed 27 February 2004.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,128,053 (**Brandt** et al.) in view of JP 3-118517 (**Fujii**) and JP 6-260265 (**Ueda**).

Regarding claim 1, **Brandt** discloses a heater 11 for an LCD display comprising

(i) and (ii) a dummy cell 1 (called "passive liquid crystal cell" in Brandt at the paragraph bridging cols. 3-4) adapted for use in the LCD,

(iii) said dummy cell 1 comprising two substrates 2, 3 with liquid crystal therebetween;

(iv) a heater 11;

(v) said heater 11 comprising a transparent conductive electrode 9 which may be ITO (col. 4, lines 50-51) --as further limited by instant claim 2;

(vi) wherein there are two conductive electrodes for the heater, one at each respective opposite side of the layer (Figs. 4-5; col. 6, lines 18-33 especially the last sentence);

(viii) the heater 11 embedded in the dummy cell 1. (See also, col. 3, lines 27-43 and col. 4, lines 48-56 and the figures.

Brandt does not teach using item (vii), the electrically conductive spacing means of said dummy cell for simultaneously maintaining a desired cell gap and equalizing the electric potential between said two substrates.

Fujii teaches the benefits of using conductive spacers to equalize the potential thereby preventing electrostatic charge build up on the substrates of the liquid crystal cell that distorts the image.

It would have been obvious for one of ordinary skill in the art, at the time of the invention to use the conductive spacers of **Fujii** in the liquid crystal cells of **Brandt** to prevent image distortion, as taught by **Fujii**.

Then the only difference is that **Brandt** does not teach that the electrodes are secured to the ITO heater layer 9 using a conductive adhesive.

Ueda teaches a heating element having especially uniform heating characteristics formed by applying metal electrodes 7 along opposing edges of a transparent conductive sheet 1 using conductive adhesive 9.

It would have been obvious for one of ordinary skill in the art, at the time of the invention to use the electrode configuration in **Ueda** as that in **Brandt** to gain uniform heating and thereby better image quality.

Response to Arguments

3. Applicant's arguments filed 27 February 2004 have been fully considered but they are not persuasive.

Regarding the restriction requirement, Applicant indicates that claims 3-34 have been amended to be drawn to the elected invention. Examiner respectfully disagrees. Only the preambles have been amended and the claims are still very clear drawn to an LCD. That the preamble --which does **not** have patentable weight-- was amended to recite a heater instead of LCD, while the claims remain drawn to the LCD does not change the fact that the claims are drawn to the LCD --**not** to the heater.

More importantly, Applicant has apparently disregarded the restriction requirement filed 24 April 2003 which clearly indicated that Applicant was required to elect a single species in Group II (i.e. claims 3-34). It would appear that Applicant's attempt to modify the claims 3 to 34 is an attempt to avoid the restriction requirement. Applicant elected the invention of Group I, claims 1 and 2, in the paper filed 28 July 2003, **without** traverse. The invention of Group II is separate from Group I for reasons already of record. Accordingly, claims 3-34 stand withdrawn from further consideration as being drawn to non-elected species. **The claims 3-34 may be entitled to rejoinder.** They will not however, be considered until the allowance of a generic claim.

4. Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik Kielin whose telephone number is 571-272-1693. The examiner can normally be reached on 9:00 - 19:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr. can be reached on 571-272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Erik Kielin
Primary Examiner
4 May 2004